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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/661,805

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Kishore Swaminathan

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ACCENTURE CHICAGO 28164
BRINKS HOFER GILSON & LIONE
P O BOX 10395
CHICAGO, IL 60610

EXAMINER

PARDO, THUY N

ART UNIT

PAPER NUMBER

2165

MAIL DATE

DELIVERY MODE

07/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/661,805

Applicant(s)

SWAMINATHAN ET AL.

Examiner

Thuy N. Pardo

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 18 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-14,16,17,20-27,29 and 30 is/are rejected.
- 7) ☒ Claim(s) 3, 15, 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/26/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 22, 2007 has been entered.
2. In the Applicant's Amendment filed on June 22, 2007, claims 1-17 and 20-30 are pending in the application., claims 18 and 19 are withdrawn, and claims 1, 7 and 20 are amended. This Office Action is Non-Final.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey et al. (Hereinafter "Dailey") US Patent Application Publication No. 2004/0122689 in view of Glass et al. (Hereinafter "Glass") US Patent Publication No. 2005/0060643.

As to claim 1, Dailey teaches the invention substantially as claimed, comprising:

a) determining, automatically, a level of similarity between at least two of a plurality of discrete elements stored in the document repository [determine if any other part names include, or are analogous to the new part name based on characteristics such as weight, dimensions, cost etc, 0010. Dailey further teaches that the comparison may occur automatically upon the establishment of a new part, see 0009];

c) wherein said document repository is automatically updated by said system whenever discrete elements is added to the document repository [automatically modified accordingly, 0018].

However, Dailey does not explicitly teaches b) storing data representative of a link between the elements based in-part on the level of similarity within the document repository although it has the same functionality of linking related parts [see Dailey, 0008; 0012; 204-206 of fig. 2]. Glass teaches b) storing data representative [a sample document (or data representative) of the classification of the most significantly resembling is assigned to the unclassified document, see the abstract; 0375-0376; 0390] of a link between the elements based in-part on the level of similarity [0341; 0352; 0365].

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the limitations of Glass to Dailey's system as an essential means to allow traceability related documents in the document repository.

As to claim 2, Dailey and Glass teach the invention substantially as claimed. Glass further teaches that the document repository includes documents of at least one type selected

from the group comprising a plain text document, a formatted text document, a presentation with discrete pages or slides, a diagram, a spreadsheet, programming code, a semi-structured document database, a text document with mark-up language tags, and a fully structured relational database [email message and HTML tags, 0215; 0247].

As to claim 4, Dailey and Glass teach the invention substantially as claimed. Glass further teaches displaying the link on a display [0250-0255; 0299-0301; 0404].

As to claim 5, Dailey and Glass teach the invention substantially as claimed. Glass further teaches that the document repository includes at least two physical repositories [0283; 0250].

As to claim 5, Dailey and Glass teach the invention substantially as claimed. Glass further teaches classifying the plurality documents as belonging to one category of a plurality of predetermined categories [1012 of fig. 12], the classification being based on at least one of the group comprising a format for the document, a physical structure for the document, a logical structure for the document, a size of the document, a location where the document is stored, and a content of the document [818-828 of fig. 8].

4. Claims 7-14, 16-27, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey et al. (Hereinafter "Dailey") US Patent Application Publication No. 2004/0122689 in

view of Glass et al. (Hereinafter "Glass") US Patent Publication No. 2005/0060643 and in further view of Wical US Patent No. 6,460,034.

As to claim 7, Dailey and Glass teach the invention substantially as claimed, with the exception of retrieving a plurality of documents from a document repository, segmenting at least two documents of the plurality of documents into a plurality of conceptually meaningful segments, and determining if a segment of one document is related to a segment of another document and storing data representative of the relationship. Wical teaches retrieving a plurality of documents from a document repository [col. 23, lines 1-54], segmenting at least two documents of the plurality of documents into a plurality of conceptually meaningful segments [groups IA, IB, IIA, col. 23, lines 1-53-4], and determining if a segment of one document is related to a segment of another document and storing data representative of the relationship [col. 24, lines 56 to col. 25, lines 6; 2, 3, 10 of fig. 4; 8 of fig. 9A; 8 of fig. 9B]. It would have been obvious to one of ordinary skill in the art at the time of the invention to add the limitations of Wical to Dailey-Glass's system as an essential means to increase the efficiency of document classification.

As to claims 8 and 20, all limitations of these claims have been addressed in the analysis of claim above, and these claims are rejected on that basis. Glass further teaches that said document repository may contain documents of various types [Content-Type: text/plain and text/html, 312 and 316 of fig. 4], and the one document being of a first type and the other

document is of either a first type or of a second type [linked file or attached file, claims 11-20; 840-850 of fig. 3-4].

As to claim 9, Dailey, Glass and Wical teach the invention substantially as claimed.
Wical further teaches classifying the plurality of documents [fig. 8A-9C].

As to claim 10, Dailey, Glass and Wical teach the invention substantially as claimed.
Wical further teaches that the document repository is organized in accordance with a directory structure [fig. 8A-9C], and the step of classifying further comprises classifying the plurality of segments based in-part on the directory structure [see 8 of fig. 9A-9B].

As to claim 11, Dailey, Glass and Wical teach the invention substantially as claimed.
Wical further teaches that each document comprises a document name [fig. 9B], and the step of classifying further comprises classifying the plurality of segments based in part on the document name [part of the name "French", fig. 9B].

As to claim 12, Dailey, Glass and Wical teach the invention substantially as claimed.
Glass further teaches classifying the plurality of segments as being a segment type selected from a group comprising requirement, design, code, testing, defects, issues and requests [0203; 0381].

As to claim 13, Dailey, Glass and Wical teach the invention substantially as claimed.
Wical further teaches that the step of classifying further comprises classifying the plurality of

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segments based in part on a plurality of classification keywords [col. 12, lines 46 to col. 13, lines 6; fig. 8A-9C].

As to claim 14, Dailey, Glass and Wical teach the invention substantially as claimed. Wical further teaches comparing the plurality of segments [tables 14-17 of col. 23-24].

As to claim 16, Dailey, Glass and Wical teach the invention substantially as claimed. Wical further teaches performing a pair-wise cosine similarity analysis among the plurality of segments [col. 17, lines 62 to col. 19, lines 5].

As to claim 17, Dailey, Glass and Wical teach the invention substantially as claimed. Glass further teaches that the document repository includes documents associated with a software project [0365-0366].

As to claims 21-27, 29 and 30, all limitations of these claims have been addressed in the analysis above, and these claims are rejected on that basis.

Response to Arguments

5. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that neither Glass nor Wical teach a memory configured to store data representative of a link between at least one segment and one selected from the group consisting the plurality of segments and the plurality of document as specified in claims 20-30.

Examiner respectfully disagrees. Since Glass teaches the feature of storing data representative [a sample document (or data representative) of the classification of the most significantly resembling is assigned to the unclassified document, see the abstract; 0375-0376; 0390] of a link between the elements based in-part on the level of similarity [0341; 0352; 0365], a memory for storing the data representative and its link is inherent in the system.

Allowable Subject Matter

6. Claims 3, 15 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 3, the limitations of retrieving a document from the repository, and determining a document type and a physical structure for the document and identifying one or more conceptually meaningful segments (elements) within the document based on at least one of the document type and the physical structure, taken together with other limitations of claim 1 were not disclosed by the prior art of record.

As to claims 15 and 28, the limitations of extracting a plurality of terms from the segments and for each segment, determining the frequency of at least one of the plurality of words within

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the segment, taken together with other limitations of claims 7 and 14, or 20 and 27 were not disclosed by the prior art of record.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy N. Pardo whose telephone number is 571-272-4082. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 20, 2007

A handwritten signature in black ink, appearing to read 'Thuy Pardo', with a stylized, cursive script.

**THUY PARDO
PRIMARY EXAMINER**